University of Missouri Extension ----- and ----Iron County Soil & Water Conservation District



Quarterly Newsletter

April, May, June 2011

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Preserving Soil & Water through Conservation

University of Missouri, Lincoln University, U.S. Department of Agriculture & Local Extension Councils Cooperating

University of Missouri Extension does not discriminate on the basis of race, color, national origin, sex, sexual orientation, religion, age disability or status as a Vietnam-era veteran.

Search for Missouri Century Farms Continues

COLUMBIA, Mo. – If your farm has been in your family since Dec. 31, 1911, you can apply to have it recognized as a Missouri Century Farm.

To qualify, farms must meet the following guidelines: The same family must have owned the farm for 100 consecutive years. The line of ownership from the original settler or buyer may be through children, grandchildren, siblings, and nephews or nieces, including those through marriage or adoption. The farm must be at least 40 acres of the original land acquisition and make a financial contribution to the overall farm income.

"It is important to honor and respect our history," said Michael Ouart, vice provost for University of Missouri Extension. "These farms represent both Missouri's cultural heritage and the good stewardship that our farmers strive for."

In 2008, the Missouri Farm Bureau joined MU Extension and the MU College of Agriculture, Food and Natural Resources as a program sponsor.

"Missouri Farm Bureau is a proud partner in the recognition of century farms," said Blake Hurst, president. "We applaud the hard-working farm families that have kept us fed and clothed for generations. They represent an important part of our heritage and laid a foundation for the bounty Americans enjoy every day."

Applicants certified as owners of a 2011 Missouri Century Farm will be recognized by the local MU Extension office in the county where the farm is located. Applicants are presented with a sign and a certificate.

Since Missouri began the program in 1976, more than 7,500 Century Farms have been recognized.

For applications received by May 1, a \$50 fee covers the cost of a certificate, farm sign and booklet for approved applicants. If the application is received between May 1 and May 16, the cost is \$60. Applications must be postmarked by May 16, 2011, to be considered.

For application forms and information, call Extension Publications toll-free at 1-800-292-0969, contact your local MU Extension office at 573-546-7515, or visit the program website at http://extension.missouri.edu/centuryfarm.

Book to Commemorate Historic Farms

In addition to being recognized locally, there is a new opportunity for Missouri Century Farm owners. This year's applicants and existing Century Farm owners can have their farms featured in a <u>35th-anniversary commemorative book honoring Missouri's historic farms</u>. It's free to have your Century Farm featured in the book, which will include regional histories; a special feature on how agriculture has changed through the years, including technology, crops and equipment; and the 35-year history of the Missouri Century Farm program.

For more information about including your farm in the book and buying your own copy, visit the Missouri Century Farm website at http://extension.missouri.edu/centuryfarm or call Acclaim Press toll-free at 1-877-427-2665.

Iron County Soil & Water Conservation District

Addressing Agricultural Concerns

Sensitive Area is land where current management has impacted erosion, surface water and ground water. **Solution:** plant grass buffers or woody species along the edges of crop fields or below cropland to trap runoff; plant trees or shrubs to reduce wind erosion; exclude livestock from streams; and place large stones or anchored cedar trees to eroding streambanks. To protect groundwater: establish buffers or exclusion around sinkholes; create spring collection points for livestock use; and fill and seal abandoned wells.

Sheet, Rill and Gully Erosion is the unwanted removal of soil from the land surface or through incised channels by the action of rainfall and runoff. **Solution**: establish a good vegetative cover to stabilize the soil; build terraces to reduce the erosive force of water; use a no-till system; plant trees and shrubs at the edge of fields to help with wind erosion; build a pond to catch sediment; develop diversions to direct rainwater; and plant sod-forming grasses to efficiently transport rainfall.

Woodland Erosion is caused by the removal of soil or vegetation through livestock trampling or improper tree harvesting. **Solution:** plant trees and shrubs; install fence t exclude livestock; ensure that timber harvest operations use proper construction of logging roads and stream crossings; and correct gully erosion through proper timber harvest practices.

Grazing Management can stop the damage caused by the steady use of an area by livestock

which causes erosion and affects water quality. **Solution:** improve the vegetative cover on pastures; and develop a planned grazing system that may include developing water sources and water distribution, fencing to construct paddocks, lime to manage the pH of the soil and the interseeding of legumes.

How To Get Started...a call or visit to your local soil & water conservation district office will get you on your way to improving your farm through conservation practices. Call the Iron County SWCD at 573-546-6518, visit **www.swcd.mo.gov/iron** or **www.dnr.mo.gov/env/swcp/** for more information.

How to Improve Soil and Water Resources on Your Farm

Through the 114 local soil & water conservation districts, the Missouri Department of Natural Resources'
Soil and Water Conservation Program provides financial and technical assistance to agricultural landowners for conservation practices. Here are a few examples of how these practices can benefit you:

* Keep your valuable topsoil * Get the best use of your soil and water resources * Develop the best nutrient and pest management plan for your needs* Install a rotational grazing system benefiting your livestock, water resources, land and time

* Through irrigation management, efficiently and uniformly apply water to control runoff and conserve water supplies

* Recycle animal waste for use on agricultural land* Protect your groundwater.

Conservation practices can save you time and money and increase your farm's production while protecting the overall natural environment of the state. Landowners can receive up to 75 percent cost-share to install practices through their local district.

The Soil and Water Conservation Program is funded by the one-tenth-of-one-percent parks, soils and water sales tax and administers those funds through local soil and water conservation districts.

Be Sure to Soil Test Hay Fields and Fertilize Accordingly!

Adequate amounts of lime, nitrogen, phosphate, potash, and minor elements are needed to produce high yields of hay per acre and to maintain stands of desirable plants for a long period of time. A soil test should be used as a guide in determining the amount of fertilizer and lime needed for economical hay production.

Nutrient Removal Rates

(pounds removed per crop per acre)

Forage	Nitrogen	Phosphorus	Potash
Fescue Hay (3 ton/ac)	135	65	185
Fescue/Clover Hay (3 ton/ac)	150	68	114
Bermuda Hay (6 ton/ac	258	60	288
Alfalfa Hay (5 ton/ac)	280	75	300

From: Ball et al. 2008. Southern Missouri Forages

No-till Drill Available to Rent \$8.00 per Acre

Call 573-546-6518 For more information



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Debra Henk, 4-H Youth Development Specialist and County Program Director Elaine Willhite, Office Manager

Office # 573-546-7515

Soil Savers Corner

Spring Is In The Air

Basket



Forsythia

Bonnet Green Lilac Bunny Chicks (Easter) Lilies Crocus Peep Frogs Daffodil Red Bud Easter **Tulips** S Е Е P C S O R Ε S F S Т R A S K Ε O G C Y W S 0 Α В R R Н D I G C M L R O Ε В C Н F O D I Ε Е U G R Ε N Α

R E D B U D Y L

Nutrition Education

An important function of the Extension Office

The Food and Nutrition Education Program from University of Missouri Extension offers nutrition education to all Missourians, young and old. Pattie Jones is a Nutrition Program Assistant in Iron and Madison Counties, and her goal is to help her clients achieve lifelong health and fitness.

As an NPA, Pattie's focus is mainly on Missouri school children, but she also works with low-income families, both in their homes and in classes. She teaches her clients skills that pave the way for nutritional well-being and health. Programming considers the clients' needs as far as age, culture, reading level and abilities. Lessons are designed with hands-on activities for youth, the adults who support them, pregnant teens and immigrant families.

Pattie says that she often hears from clients years after they participate in classes. They tell her how FNEP impacted their lives positively.

With her in-school lessons, children learn that trying new foods is fun. Pattie and her co-worker Brenda Middleton bring new foods into classrooms for tastetests. This year, kids have tried kiwis, granola, yogurt, broccoli and cauliflower, and other food items.

Pattie also teaches kids that physical activity is essential to build strong bones and muscles, and that hand washing and food safety can protect their health.

In her adult program, clients learn how to fix healthy foods that taste great, how to observe food safety rules, and how to stretch food dollars.

Pattie's influence extends beyond Iron and Madison Counties. She developed Show-Me Nutrition educational displays, used in schools and health department offices across the state.

Pattie does about 16 nutrition educations classes per month for Iron County C-4 Schools in Viburnum, and visits Marquand Zion school in Madison County, along with delivering the Show-Me Nutrition education displays.

Pattie says, "Too often the small rural schools are forgotten. I consider myself so fortunate to be able to work with such incredible school districts. Although in small towns, these schools are HUGE in the areas that matter. The FNEP is such an important program and after working for 19 years I have students that are now adults that see me and say what an impact this program had on them. That is our goal. "

Canning Classes Offered Debra Henk, 4-H Youth Specialist

Gardeners are gearing up for a another gardening year, and preserving summer's bounty for the cold days of winter is good budget move. If you would like to learn the basics, or refresh your knowledge, sign up for Extension canning classes.

June 7th will cover pressure canning—all low acid products, like green beans, must be pressure canned. A class on June 28 will cover boiling water bath canning.

Classes will be held at the Iron County Health Department, at 6:30 pm. There will be a \$5 charge to cover materials. Call the Iron County Extension Office at 546-7515 to register, or for more information.

Gardening and Food Preservation

Call University Extension at 546-7515 for guides on gardening, vegetable harvest and storage, canning, freezing, or drying foods. There is no cost for the guides sheets. If you haven't done a soil test on your garden in a while, now might be a good time.

Call and ask for "Steps in Fertilizing Garden Soil" or ask for directions for taking the test. The cost of the soil test is \$15 and the results take 1-2 weeks. If you have an e-mail address, we can expedite your test results.

Upcoming Programs:

Wednesday, April 6 - Women in Ag program. 8 a.m.-3 p.m., Sam A. Baker Lodge, Patterson.

Thursday, April 21 - Fence Building Workshop, 2-5 p.m., Henson Farms, Williamsville.

April 21-23 – Ian Mitchell-Innes workshop on high stock density grazing. This program is not conducted or sanctioned by Extension and is for your information only. Located in the Mill Spring area. Contact Eric Fuchs at 573-429-1383 for more information.

Saturday, May 7 – Southeast Show-Me-Select heifer sale, 1 p.m., Fruitland Livestock Auction.

Saturday, May 14 - Goat and Sheep Conference, 8 a.m.-3 p.m., Fredericktown United Methodist Church.

You can RSVP to Kendra Graham, Livestock Specialist @ 573-224-5600 ext. 8 for any of the programs except the Mitchell-Innes workshop.



Upcoming Grazing School

Missouri Forage and Grassland Council will be holding some upcoming area grazing schools. Below, are just a few. For a complete list, visit: agebb.missouri.edu/mfgc/schools.htm

Location / Date	Contact Person
Rolla / April 14-15	Paula Wade
West Plains / April 27-29	Logan Wallace 417-256-2391 or Jamie Kurtz 417-256-7117x3
Park Hills / May 9-10	Patty Roth 573-883-3566x3
Willow Springs / Oct.12-14	Amber Comstock 417-256-7117x3 or Jamie Kurtz 417-256-7117x3

Ag History Fun Facts

In 1701, Jethro Tull invented the seed drill. The first prototype seed drill was built from the foot pedals of Tull's local church organ. 1793 brought about the cotton gin by Eli Whitney, patented in 1794. 1819-1825 the U.S. food canning industry was established. In 1831 Cyrus Hall McCormick, a Chicago industrialist & inventor, had the first commercially successful reaper, a horse-drawn machine to harvest wheat. In 1837, John Deere and Leonard Andrus began manufacturing steel plows. A practical threshing machine was patented that same year. The first grain elevator was built by Joseph Dart of Buffalo, NY in 1842. In 1844 a practical mowing machine was patented. Irrigation began in Utah in 1847. In 1849, mixed chemical fertilizers were sold commercially. In 1850, Edmund Quincy invented the corn picker. The stationary baler or hay press was invented in the 1850's, but didn't become popular until the 1870's. Steam tractors were tried out in 1868. Silos came into use in the 1870's, along with deep-well drilling. Glidden barbed wire was patented in 1874, ending an era of unrestricted, open-range grazing. In 1879, Anna Baldwin patented a milking machine that replaced hand milking. Her machine was a vacuum device that connected to a hand pump, but was not a successful invention. In 1936, a man named "Innes" from Davenport, lowa, pioneered an automatic self-tying baler for hay. It tied bales with binder twine using Appleby-type knotters from a John Deere grain binder. Ed Nolt, a Pennsylvania Dutchman, built on this innovation by using the twine knotters from the Innes baler, building the first successful automatic pickup square baler. New Holland began to market this design in 1940, with great success. A single farmer could bale 35 to 40 tons of hay per day.